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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/669,899	09/27/2000	Makiko Endo	35.C14832	4427

5514 7590 05/07/2003

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EXAMINER

SHOSHO, CALLIE E

ART UNIT	PAPER NUMBER
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1714

16

DATE MAILED: 05/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/669,899

Applicant(s)

ENDO ET AL.

Examiner

Callie E. Shosho

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 7-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 7-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

1. All outstanding rejections are overcome by applicants' amendment filed 1/30/03.

In light of the new grounds of rejection as set forth below, the following action is non-final.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 7-11, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 55139741.

Pending translation, it is noted that JP 55139471 discloses ink jet ink comprising colored polymer dispersed in aqueous medium wherein the colored polymer comprises acrylic polymer and disperse dye wherein the dye is dispersed in the polymer followed by heating.

While JP 55139471 discloses that the ink is printed using ink jet printer and that the ink is ejected through nozzle onto substrate, there is no explicit disclosure that the ink is ejected through nozzle in correspondence with recording signal or that the printer comprises ink cartridge or container for holding the ink. However, given that JP 55139471 discloses ink jet printer, it is clear that these are inherent features of any ink jet printer. That is, an ink jet printer

would inherently contain cartridge or container for ink and the ink would inherently be ejected in response to signal.

Further, while JP 55139471 discloses that the disperse dye is impregnated in the polymer, there is no explicit disclosure that the dye is sublimated to the polymer, given that the polymer is dyed by adding dye to polymer and then heating, it is clear that in using this process, the dye would inherently sublimate.

In light of the above, it is clear that JP 55139471 anticipates the present claims.

4. Claims 1, 11, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Keaveney et al. (U.S. 5,114,479).

Keaveney et al. disclose ink comprising oil-soluble dye or disperse dye in an acrylic latex (col.1, lines 64-67, col.2, lines 23-28 and 61-63, col.3, lines 20-24, and col.5, lines 25-36).

Although there is no explicit disclosure that the dye is sublimated and penetrated to the film-forming polymer, given that the polymer is dyed by adding dye to polymer and then heating with mixing, it is clear that in using this process, the dye would inherently sublimate and penetrate into the polymer.

In light of the above, it is clear that Keaveney et al. anticipates the present claims.

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 2-4 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 55139471 or Keaveney et al. (U.S. 5,114,479) either of which in view of EP 130789.

The disclosures with respect to JP 55139471 and Keaveney et al. in paragraphs 3 and 4, respectively, are incorporated here by reference.

The difference between JP 55139471 or Keaveney et al. and the present claimed invention is the requirement in the claims of minimum film-forming temperature of the acrylic polymer.

EP 130789, which is drawn to ink jet ink, disclose the use of a colored polymer which has film-forming temperature less than 35⁰ C in order to produce an ink with excellent water resistance which produces a continuous film (page 19, lines 10-15 and col.17, lines 15-29).

In light of the motivation for using polymer with specific minimum film-forming temperature disclosed by EP 130789 as described above, it therefore would have been obvious to one of ordinary skill in the art to control the minimum film-forming temperature of the polymer of JP 55139471 or Keaveney et al. in order to produce an ink with excellent water resistance, and thereby arrive at the claimed invention.


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 703-305-0208. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone numbers for the

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organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


Callie E. Shosho
Examiner
Art Unit 1714

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May 3, 2003